In the Claims:

Claims 1 to 7 (Canceled).

8. (Currently amended) ~~Milling~~ A milling method for the production of a structural ~~components~~ component from ~~materials~~ at least one material that [[~~are~~]] is difficult to machine by chip-cutting, while producing depressions with at least one sidewall, ~~especially for the production of integral bladed rotors for gas turbines, whereby the depressions especially form flow channels and the sidewalls especially form blade surfaces,~~ whereby a milling tool is moved along at least one defined tool path ~~or milling path~~ for the milling, characterized in that, in addition to the or each tool path, at least one collision contour corresponding to the surfaces or edges of the at least one sidewall is defined and the position or orientation of the milling tool relative to the or each collision contour is monitored, whereby the position or orientation of the milling tool is changed and/or an error message is generated if at least one of the collision contours is damaged by the milling tool, and whereby the or each collision contour relates to the structural component to be produced.

9. (Currently amended) ~~Method~~ The method according to claim 8, characterized in that the position or orientation of the milling tool along the or each tool path relative to the structural component to be milled are determined by a tool ~~vectors,~~ vector, whereby the tool ~~vectors are~~ vector is defined with a cutting advance ~~or lead angles~~ angle and ~~clearance or~~ a pitch ~~angles.~~ angle of the milling tool.

10. (Currently amended) ~~Method~~ The method according to claim 8, characterized in that, for the milling of the depressions that are bounded by two of the sidewalls, two collision contours are defined, ~~whereby~~ of which a first collision contour lies on a first said sidewall and a second collision contour lies on a second said sidewall.

11. (Currently amended) ~~Method~~ The method according to claim 10, characterized in that, when the milling tool damages the collision contour that lies on the sidewall that is currently to be milled, the position or orientation of the milling tool is changed ~~in such a manner~~ so that the damage of the collision contour is removed.

12. (Currently amended) ~~Method~~ The method according to claim 11, characterized in that ~~for this purpose, the clearance or~~ a pitch angle of [[~~the~~]] a tool vector of the milling tool is increased for changing the position or orientation

of the milling tool so that the damage of the collision contour is removed.

13. (Currently amended) ~~Method~~ The method according to claim 10, characterized in that, when the milling tool damages the collision contour that lies on the sidewall lying opposite the sidewall that is currently to be milled, an error protocol and/or an error message is generated.

14. (Currently amended) ~~Method~~ The method according to claim 13, characterized in that the error protocol is used for the dimensioning of the milling ~~tool, especially for the determination of the miller diameter.~~ tool.

15. (New) The method according to claim 13, characterized in that the error protocol is used for determining a miller diameter of the milling tool.

16. (New) The method according to claim 8, characterized in that the structural component to be produced is an integral bladed rotor for a gas turbine, wherein the depressions form flow channels and the sidewalls form blade surfaces of the integral bladed rotor.

17. (New) The method according to claim 8, wherein the error message is generated if at least one of the collision contours is damaged by the milling tool.

18. (New) The method according to claim 8, wherein each said collision contour respectively consists of a one-dimensional line in three-dimensional space.

19. (New) The method according to claim 18, wherein said one-dimensional line in three-dimensional space corresponds to one of the edges of the component to be produced.

20. (New) The method according to claim 19, wherein each said collision contour is respectively defined by moving the milling tool along and in contact with a respective one of the edges of the component to be produced.

21. (New) A method of producing a milled component by milling a raw material with a milling tool, comprising the steps:

a) defining a proposed tool path along which said milling tool will be moved to mill said raw material into a desired milled shape of said milled component, wherein said tool path defines the space that will be occupied by said milling tool as said milling tool is moved to mill said raw material;

b) defining at least one collision contour of said desired milled shape of said milled component, wherein each said collision contour establishes a respective boundary which may not be crossed by said proposed tool path to avoid damaging said desired milled shape;

c) comparing said proposed tool path with said at least one collision contour to determine whether said proposed tool path crosses said at least one collision contour;

d) generating a collision signal indicative of a collision if said proposed tool path is determined to cross said at least one collision contour in said step c);

e) using said proposed tool path as a final tool path if said proposed tool path is determined not to cross said at least one collision contour in said step c); and

f) milling said raw material by moving said milling tool along said final tool path to produce said milled component.

22. (New) The method according to claim 21, wherein said collision signal comprises an error message indicating to an operating personnel that said collision has been determined.

23. (New) The method according to claim 21, wherein said collision signal comprises an error protocol that is carried out if said collision has been determined.

24. (New) The method according to claim 21, further comprising, in response to said collision signal, revising said

proposed tool path to thereby define a final tool path that will not cross said at least one collision contour.

25. (New) The method according to claim 21, wherein said step of defining said at least one collision contour comprises moving said milling tool along and in contact with at least one edge of a sample model that has said desired milled shape of said milled component, wherein said at least one edge thereby defines said at least one collision contour.

26. (New) The method according to claim 21, wherein each said collision contour respectively consists of a one-dimensional line in three-dimensional space.

27. (New) The method according to claim 26, wherein said one-dimensional line corresponds to an edge of said desired milled shape of said milled component.

[RESPONSE CONTINUES ON NEXT PAGE]

<u>In the Abstract</u>:

Please **delete** the paragraph at **page 12, lines 2 to 12.**

Please **add** a new paragraph at **page 12, following line 12** as follows:

> In a milling method for producing a structural component from a raw material by chip-cutting, a milling tool is moved along at least one defined tool path for the milling. In addition to the at least one tool path, at least one collision contour is also defined. The position or orientation of the milling tool relative to the collision contour(s) is monitored. The position or orientation of the milling tool is changed and/or an error message is generated if at least one of the collision contours is damaged, i.e. intersected, by the milling tool.

[RESPONSE CONTINUES ON NEXT PAGE]